AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph at page 1, lines 6-16, with the following amended paragraph:

~~Description~~ BACKGROUND OF THE INVENTION

FIELD OF THE INVENTION

The invention relates to a method of producing hydroxylammonium salts by catalytic reduction of nitrogen monoxide with hydrogen in a diluted aqueous solution of mineral acid in the presence of platinum catalysts suspended on a support in multiple subsequent reaction stages.

BACKGROUND ART

On page 4, line 11, before the paragraph beginning "It was the technological object", please insert the following:

SUMMARY OF THE INVENTION

Please replace the paragraph on page 4, lines 19-35, with the following amended paragraph:

This object is achieved by a method for producing hydroxylammonium salts by reacting nitrous oxide (NO) with a molar hydrogen surplus in an aqueous medium of strong mineral acids in the presence of a noble metal catalyst suspended on a carbon-based support at excess pressure up to 10 bar and temperatures up to 80°C, the hydroxylammonium salt being constantly removed from the reaction vessel, said vessel being a stirred reactor with an agitator shaft and agitator blades attached to it via a hub and bearing surface or support, wherein, according to the invention

- a gas inlet and distribution system is provided in the lower part of the stirred reactor,
- a disk agitator is placed immediately above, the hub with bearing surface or support of which comprising angled, concave and tilted agitator blades that rotate their angled [[or]] and concave sides in the direction of motion (i.e. their concave sides move against the liquid), and

Please replace the paragraph on page 5, lines 26-31, with the following amended paragraph:

Platinum is used as the catalyst for reducing the nitrogen monoxide, preferably applied to the graphite in quantities from 0.1 to 0.5 percent by weight ~~and having~~ which has a mean diameter in the range from 30 to 80 µm. This supported catalyst is used in the aqueous sulfuric acid in a fine suspension at concentrations from 7 to 50 g/l.

Please replace the paragraph on page 6, lines 16-23, with the following amended paragraph:

The modified disk agitator (Fig. 2) according to the invention at the bottom end of the special agitating device is characterized in that 6 concave blades having outwardly angled edges (half-pipes) are attached at an angle to the rotating disk, the individual blades having a relative width in relation to the agitator of 0.2 to 0.3 (b1 : d2 in Fig. 1). The relative agitator diameter is in the range from 0.3 to 0.4 in relation to the reactor diameter (d2 : d1 in Fig. 1).

Please replace the paragraph on page 7, lines 6-14, with the following amended paragraph:

The stirred reactor to be used according to the invention with both agitators (Fig. 1) is schematically shown in Figs. 1 to 3. This agitating device consists of a central cylindrical agitator shaft with a modified highly efficient disk agitator attached to its bottom end. Agitator blades domed against the direction of stirring ~~and set in at an angle~~ having outwardly angled edges are attached to the rotating disk. The top portion of the agitator shaft is linked to a blade agitator consisting of multiple offset leaves with different angles of incidence.

On page 7, at line 21, please delete the word [[Wherein:]] and replace it with the following:

BRIEF DESCRIPTION OF THE DRAWINGS

On page 8, please replace the paragraphs, lines 5-23, with the following amended paragraphs:

1 Agitator shaft

1 Agitator blades

[[2]] 12 Bearing surface

[[3]] 13 Agitator flange

Fig. 3 Blade agitator

1 Agitator shaft

[[4]] 14 Blade

[[5]] 15 Blade axis

[[6]] 16 Individual blades

[[7]] 17 Angle between individual blades and blade axis

[[8]] 18 Supporting or reinforcing sheets

[[9]] 19 Clamping hub

[[10]] 20 Screwed connection

~~Explanations regarding Figs. 1 to 3~~

Fig. 1

DETAILED DESCRIPTION OF THE DRAWINGS

Please replace the paragraph on page 9, lines 18-24, with the following amended paragraph:

The drawing shows the design of the 6-blade disk agitator used. The agitator blades or half-pipes (11) whose concave sides are bent against the direction of rotation are mounted on a bearing surface and have outwardly angled edges. The agitator flange [[12]] 13 is screwed to the shaft (1) for individual adjustment of the installation height of the agitator.

Please the paragraph on page 9, line 28 through page 10, line 2, with the following amended paragraph:

Fig. 3 shows the blade agitator used for wetting the reactor cap with liquid and preventing the formation of foam. It consists of two blades (14) arranged at an angle of incidence in relation to the liquid level between 45° and 90°, preferably 90°. Each blade consists of offset individual lamella-like leaves (16) that are tilted towards the blade axis (15) at angles (17) between 0° and 30°, preferably between 14° and 24°. Supporting or reinforcing sheets (18) are used to stabilize the design. ~~As they are designed as screwed-on clamping hubs, their installation height on the shaft (1) can be adjusted individually.~~ Due to the design with screwed-on clamping hub (19, 20) the installation height on the shaft (1) can be adjusted individually.

Please replace the paragraph on page 10, lines 16-30, with the following amended paragraph:

It is an advantage of the method according to the invention that the reduction reaction, due to the effect of the special agitating apparatus, surprisingly proceeds at an extraordinarily high rate, facilitating increased throughput without the need to enlarge the reaction chamber. This outcome specifically results from the special design of the modified disk agitator that is able to disperse the gas mixture consisting of nitrogen monoxide and [[oxygen]] hydrogen and introduced directly below the agitator from a gas inlet and distribution system extremely finely, as compared to other agitator types, in the aqueous sulfuric acid containing the platinum catalyst suspended on a support, to achieve complete gas distribution and high gas bubble recirculation. The resulting greatly improved mass transfer influences the processes that take place on the surface of the catalyst to an unexpectedly high degree.